

FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. CTJPL.008A	APPLICATION NO. 10/660,382
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (USE SEVERAL SHEETS IF NECESSARY)		APPLICANT Graetz, et al.	
		FILING DATE September 10, 2004	GROUP Unknown

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
CL	1	US 6,334,939 B1	1/1/02	Zhou, et al.	204	409	6/15/00

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)						
CL	2	K. Sayama, H. Yagi, Y. Kato, S. Matsuta, H. Tarui, and S. Fujitani, Abstract 52, The 11th International Meeting on Lithium Batteries, Monterey, CA, June 23-28, 2002					
	3	T. Takamura, S. Ohara, J. Suzuki, and K. Sekine, Abstract 257, The 11th International Meeting on Lithium Batteries, Monterey, CA, June 23-28, 2002					
	4	A High Capacity Nano-Si Composite Anode Material for Lithium Rechargeable Batteries, Li, et al., Electrochemical and Solid-State Letters, 2 (11) 547-549 (1999)					
	5	Li Insertion/Extraction Reaction at a Si Film Evaporated on a Ni Foil, Ohara, et al., Journal of Power Sources 119-121 (2003) 591-596					
CL	6	Highly Reversible Lithium Storage in Nanostructured Silicon, Graetz, et al., Electrochemical and Solid-State Letters, 6 (9) A194-A197 (2003)					

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EXAMINER	/Cynthia Lee/	DATE CONSIDERED	10/31/2006
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Application Number		10660382
Filing Date		2003-09-10
First Named Inventor	Graetz et al.	
Art Unit	1745	
Examiner Name	Lee, Cynthia K	
Attorney Docket Number	26-06	

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Ch	1	6852446		2005-02-08	Barbarich	
	2	6844115		2005-01-18	Gan et al.	
	3	6743547		2004-06-01	Gan et al.	
	4	6713214		2004-03-30	Koga et al.	
	5	6358649		2002-03-19	Yazami et al.	
	6	5175066		1992-12-29	Hamwi et al.	
	7	5114811		1992-05-19	Ebel et al.	
✓	8	4431567		1984-02-14	Gestaut et al.	

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Ch	9	4119655		1978-10-10	Hulme	
↓	10	3956018		1976-05-11	Kozawa	
↓	11	3536532		1970-10-27	Wantanabe et al.	
↓	12	6649033		2003-11-18	Yagi et al.	

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Ch	2	0776053	EP		1997-05-28	El-shall et al.		<input type="checkbox"/>

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OK	3	1028476	EP		2000-08-16	Kaminaka et al.		<input type="checkbox"/>
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EL	1	ARORA and ZHANG, 2004, "Battery Separators," Chem. Rev., 104:4419-4462	<input type="checkbox"/>
	2	CHARLIER et al., 1993, "First principles study of graphite monofluoride (CF) <sub>n</sub> ," Phys. Rev. B, 47:16162-16168	<input type="checkbox"/>
	3	DAVIDSON, 2003, "Lithium Batteries, Molecular Expressions, Electricity and Magnetism," Florida State Univ., <a href="http://micro.magnet.fsu.edu/electromag/electricity/batteries/lithium.html">http://micro.magnet.fsu.edu/electromag/electricity/batteries/lithium.html</a>	<input type="checkbox"/>
	4	EBERT et al., 1974, "Carbon monofluoride. Evidence for a structure containing an infinite array of cyclohexane boats," J. Am. Chem Soc., 96:7841-7842	<input type="checkbox"/>
	5	FUJIMOTO, 1997, "Structure analysis of graphite fluoride by Rietveld method," Carbon, 35:1061-1065	<input type="checkbox"/>
	6	GUPTA et al., 2001, "Raman scattering study of highly fluorinated graphite," J. Fluorine Chem., 110:145-151	<input type="checkbox"/>
	7	International Search Report Corresponding to PCT/US 2003/28395 Mailed February 8, 2005	<input type="checkbox"/>
	8	JACOBS, "Lithium battery basics, Machine Design, <a href="http://www.machinedesign.com/ASP/strArticleID/55501/strSite/MDSite/view%20Selected%20Art.asp">www.machinedesign.com/ASP/strArticleID/55501/strSite/MDSite/view Selected Art.asp</a> , downloaded Oct. 14, 2005	<input type="checkbox"/>

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Ch	9	JACOBS, "Long-lasting lithiums," Electron. Comm Technol., <a href="http://dataweek.co.za/Article.ASP?pkArticleID=1847&amp;pkIssueID=455">http://dataweek.co.za/Article.ASP?pkArticleID=1847&amp;pkIssueID=455</a> , Downloaded Oct. 14, 2005	<input type="checkbox"/>
	10	KITA et al., 1979, "Chemical composition and crystal structure of graphite fluoride," J. Am. Chem. Soc., 101:3832-3841	<input type="checkbox"/>
	11	LI, et al., 2000, "The crystal structural evolution of nano-Si anode caused by lithium insertion and extraction at room temperature," Solid State Ionics, 135:181-191	<input type="checkbox"/>
	12	MITKIN et al., 2002, "X-ray photoelectron and Auger spectroscopic study of superstoichiometric fluorographite-like materials," J. Struct. Chem., 43:843-855	<input type="checkbox"/>
	13	NAKAJIMA et al., 1999, "Electrochemical behavior of surface-fluorinated graphite," Electrochem. Acta, 44:2879-2888	<input type="checkbox"/>
	14	NANSE et al., 1997, "Fluorination of carbon blacks: an x-ray photoelectron spectroscopy study. I. A literature review of XPS studies of fluorinated carbons. XPS investigation of some reference compounds," Carbon, 35:175-194	<input type="checkbox"/>
	15	PELIKAN et al., 2003, "On the structural and electronic properties of poly(dicarbon monofluoride): solid-state semi-empirical INDO study," J. Solid State Chem., 174:233-240	<input type="checkbox"/>
	16	PILARZYK, "Lithium carbon monofluoride coin cells in real-time clock and memory backup applications," Rayovac, White Papers, <a href="http://www.rayovac.com/technical/wp_lithium.htm">http://www.rayovac.com/technical/wp_lithium.htm</a> , Downloaded Oct 17, 2005	<input type="checkbox"/>
	17	SHNEYDER, "Two-Dimensional Oxidation of SiGe," 69-71, <a href="http://www.nnf.cornell.edu/1999REU/ra/Schneyder.pdf">http://www.nnf.cornell.edu/1999REU/ra/Schneyder.pdf</a>	<input type="checkbox"/>
	18	TOUHARA et al., 1987, "On the structure of graphite fluoride," Anorg. All. Chem., 544:7-20	<input type="checkbox"/>
✓	19	WHITTINGHAM, 1975, "Mechanism of reduction of fluorographite cathode," J. Electrochem. Soc., 122:526-527	<input type="checkbox"/>

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ck	20	ZAJAC et al., 2000, "The structure and properties of graphite monofluoride using the three-dimensional cyclic cluster approach," J. Solid State Chem., 150:286-293	<input type="checkbox"/>
	21	ZHOU, et al., 1999, "Controlled Li doping of Si nanowires by electrochemical insertion method," Applied Physics Letters, 75(16):2447-2449	<input type="checkbox"/>
	22	AUTHOR (UNKNOWN), 2004, "Meeting the energy need of future warriors," National Academic Press, www.nap.edu/openbook/0309092612/html/91.html	<input type="checkbox"/>
	23	AUTHOR (UNKNOWN), 2004, "Meeting the energy need of future warriors," National Academic Press, www.nap.edu/openbook/0309092612/html/88.html	<input type="checkbox"/>
	24	AUTHOR (UNKNOWN), "Lithium Batteries," Panasonic Ideas for Life, Product brochure, www.panasonic.com/industrial/battery/oem/chem/lith/index.html	<input type="checkbox"/>
	25	AUTHOR (UNKNOWN), 2000-2005, "PowerStream Battery Chemistry FAQ, PowerStream Technology, www.powerstream.com/BatteryFAQ.html	<input type="checkbox"/>
	26	Lam et al. (Jun. 27, 2005) "Physical Characteristics and Rate Performance of (CF <sub>x</sub> ) <sub>n</sub> (0.33<x<0.66) in Lithium Batteries," J. Power Sources 153:354-359	<input type="checkbox"/>
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